Mr. James W. Stingel
G K N Sinter Metals, Inc.
P.O. Box 312 Becks Mill Road
Salem, Indiana 47167

Re: Registered Construction and Operation Status,
CP **075-12587-00011**

Dear Mr. Stingel:

The application from G K N Sinter Metals, Inc., received on August 8,2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following sintered iron powder metal parts facility, to be located at Becks Mill Road, Salem, Indiana, is classified as registered:

(a) Two (2) powder blending units, identified as 530-1 and 530-2, constructed on April 1, 1998, equipped with a dust collector, capacity: 1,470 pounds of metal powder per hour, each.

(b) One Dust Collector, identified as 530-7, constructed on January 7, 1991, capacity: 5.91 pounds of iron powder per hour.

(c) One (1) Drever Sintering Furnace, identified as 507-01, constructed on September 27, 1981, firing natural gas, exhausting to stack S06, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(d) One (1) Drever Sintering Furnace, identified as 507-02, constructed on September 27, 1981, firing natural gas, exhausting to stack S06, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(e) One (1) Drever Sintering Furnace, identified as 507-03, constructed on September 27, 1981, firing natural gas, exhausting to stacks S04 and S05, capacity:2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(f) One (1) Drever Sintering Furnace, identified as 507-04, constructed on September 27, 1981, firing natural gas, exhausting to stacks S03 and S04, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(g) One (1) Drever Sintering Furnace, identified as 507-05, constructed on September 27, 1981, firing natural gas, exhausting to stacks S07, S08 and S09, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(h) One (1) Pacific Sintering Furnace, identified as 507-07, constructed on November 1, 1985, firing natural gas, exhausting to stacks S13 and S14, capacity: 2.45 million British thermal units per hour and 450 pounds of iron powder per hour.

(i) One (1) Drever Sintering Furnace, identified as 507-08, constructed on May 1, 1998, firing natural gas, exhausting to stacks S24,S25, S26 and S27, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(j) One (1) CanEng Sintering Furnace, identified as 507-09, constructed on May 28, 1991, firing natural gas, exhausting to stacks S22 and S23, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(k) One (1) CanEng Sintering Furnace, identified as 507-10, constructed on January 1, 1992, firing natural gas, exhausting to stacks S17and S18, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(l) One (1) CanEng Sintering Furnace, identified as 507-11, constructed on October 1, 1993, firing natural gas, exhausting to stacks S21 and S22, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(m) One (1) Drever Sintering Furnace, identified as 507-12, constructed on December 1, 1994, firing natural gas, exhausting to stacks S01 and S02, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(n) One (1) Drever Sintering Furnace, identified as 507-13, constructed on December 1, 1994, firing natural gas, exhausting to stacks S15 and S16, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(o) One (1) Drever Sintering Furnace, identified as 507-14, constructed on December 20, 1996, firing natural gas, exhausting to stacks S28, S29 and S30 capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(p) One (1) Drever Sintering Furnace, identified as 507-15, constructed on March 3, 1997, firing natural gas, exhausting to stacks S31, S32 and S33, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(q) One (1) Drever Sintering Furnace, identified as 507-16, constructed on September 3, 1999, firing natural gas, exhausting to stacks S34, S35 and S36, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(r) One (1) Drever Sintering Furnace, identified as 507-17, constructed on May 12, 1997, firing natural gas, exhausting to stacks S37, S38 and S39, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(s) One (1) Draw Sintering Furnace, identified as 511-03, constructed on December 1, 1998, firing natural gas, exhausting to stacks D01 and D02, capacity: 0.145 million British thermal units per hour and 600 pounds of iron powder per hour.

(t) One (1) Draw Sintering Furnace, identified as 511-05, constructed on October 1, 1999, firing natural gas, exhausting to stacks D03 and D04, capacity: 0.145 million British thermal units per hour and 600 pounds of iron powder per hour.

(u) One (1) Area Electric Sintering Furnace, identified as 526-06, constructed on September 21, 1981, exhausting to stacks S10, S11 and S12, capacity: 200 pounds of iron powder per hour.

(v) Six (6) endothermic gas generators, identified as 507-100 through 507-105, firing natural gas, constructed in 1971, capacity: 0.250 million British thermal units per hour, each.

(w) One (1) endothermic gas generator, identified as 507-108, firing natural gas, constructed on April 1,1994, capacity: 0.250 million British thermal units per hour.

(x) One (1) endothermic gas generator, identified as 507-109, firing natural gas, constructed in 1975, capacity: 0.250 million British thermal units per hour.

(y) One (1) endothermic gas generator, identified as 507-111, firing natural gas, constructed on October 1,1994, capacity: 0.250 million British thermal units per hour.

(z) One (1) endothermic gas generator, identified as 507-112, firing natural gas, constructed on October 23,1994, capacity: 0.250 million British thermal units per hour, each.

(aa) One (1) endothermic gas generator, identified as 507-113, firing natural gas, constructed on October 28,1996, capacity: 0.750 million British thermal units per hour, each.

(bb) One (1) secondary machining operations facility, consisting of wet grinding, lathe turning, drilling, tapping, and vibratory deburring.

(cc) One (1) Sintering Furnace, identified as 507-18, constructed in February 2000, firing natural gas, firing natural gas, exhausting to stacks S40 and S41, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(dd) One (1) Sintering Furnace, identified as 507-19, constructed in April 2000, firing natural gas, exhausting to stacks S42 and S43, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(ee) One (1) Sintering Furnace, identified as 507-20, constructed in March 2000, firing natural gas, exhausting to stacks S44 and S45, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(ff) One (1) Sintering Furnace, identified as 507-21, constructed in August 2000, firing natural gas, exhausting to stacks S46 and S47, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(gg) One (1) Sintering Furnace, identified as 507-22, constructed in April 2000, firing natural gas, exhausting to stacks S48 and S49, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(hh) One (1) boiler, identified as 512-01, firing natural gas, constructed on June 15, 1995, exhausting to stack B01, capacity: 0.126 million British thermal units per hour.

(ii) One (1) boiler, identified as 512-22-2, firing natural gas, constructed in 1971, exhausting to stack B02, capacity: 0.0382 million British thermal units per hour.

The following conditions shall be applicable:

(1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR Part 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

(2) Pursuant to 326 IAC 6-2-3 (Particulate Emissions Limitations for Facilities Constructed prior to September 21, 1983), PM from the one (1) boiler identified as 512-22-2 shall not exceed 0.8 pounds per million British thermal units.

(3) Pursuant to 326 IAC 6-2-4 (Particulate Emissions for Sources of Indirect Heating), PM from the one (1) boiler identified as 512-01 shall not exceed 0.6 pounds per million British thermal units.

(4) (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the twenty-two (22) sintering furnaces shall not exceed 1.83 pounds per hour, each, when operating at a process weight rate of 600 pounds per hour, each.

(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the one (1) sintering furnace shall not exceed 1.51 pounds per hour when operating at a process weight rate of 450 pounds per hour.

(c) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the one (1) sintering furnace shall not exceed 0.88 pounds per hour when operating at a process weight rate of 200 pounds per hour.

(d) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the two (2) powder blending units shall not exceed 3.34 pounds per hour, each, when operating at a process weight rate of 1,470 pounds per hour, each.

This registration is the sixth air approval or a revised registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Management that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3)). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

CJF/MES

cc: File - Washington County
Air Compliance - Joe Foyst
Permit Tracking - Janet Mobley
Air Programs Section - Michele Boner

Registration

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	**G K N Sinter Metals, Inc.**
Address:	**P.O. Box 312 Becks Mill Road**
City:	**Salem**
Authorized individual:	
Phone #:	
Registration #:	**075-12587-00011**

I hereby certify that G K N Sinter Metals, Inc. is still in operation and is in compliance with the requirements of Registration **075-12587-00011**.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	**G K N Sinter Metals, Inc.**
Source Location:	**Becks Mill Road, Salem IN 47167**
County:	**Washington**
SIC Code:	**3714**
Operation Permit No.:	**CP 175-12587-00011**
Permit Reviewer:	**Craig J. Friederich**

The Office of Air Management (OAM) has reviewed an application from G K N Sinter Metals relating to the operation of a sintered iron powder metal parts manufacturing source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Two (2) powder blending units, identified as 530-1 and 530-2, constructed on April 1, 1998, equipped with a dust collector, capacity: 1,470 pounds of metal powder per hour, each.

(b) One (1) Dust Collector, identified as 530-7, constructed on January 7, 1991, capacity: 5.91 pounds of iron powder per hour.

(c) One (1) Drever Sintering Furnace, identified as 507-01, constructed on September 27, 1981, firing natural gas, exhausting to stack S06, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(d) One (1) Drever Sintering Furnace, identified as 507-02, constructed on September 27, 1981, firing natural gas, exhausting to stack S06, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(e) One (1) Drever Sintering Furnace, identified as 507-03, constructed on September 27, 1981, firing natural gas, exhausting to stacks S04 and S05, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(f) One (1) Drever Sintering Furnace, identified as 507-04, constructed on September 27, 1981, firing natural gas, exhausting to stacks S03 and S04, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(g) One (1) Drever Sintering Furnace, identified as 507-05, constructed on September 27, 1981, firing natural gas, exhausting to stacks S07, S08 and S09, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(h) One (1) Pacific Sintering Furnace, identified as 507-07, constructed on November 1, 1985, firing natural gas, exhausting to stacks S13 and S14, capacity: 2.45 million British thermal units per hour and 450 pounds of iron powder per hour.

(i) One (1) Drever Sintering Furnace, identified as 507-08, constructed on May 1, 1998, firing natural gas, exhausting to stacks S24,S25, S26 and S27, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(j) One (1) CanEng Sintering Furnace, identified as 507-09, constructed on May 28, 1991, firing natural gas, exhausting to stacks S22 and S23, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(k) One (1) CanEng Sintering Furnace, identified as 507-10, constructed on January 1, 1992, firing natural gas, exhausting to stacks S17and S18, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(l) One (1) CanEng Sintering Furnace, identified as 507-11, constructed on October 1, 1993, firing natural gas, exhausting to stacks S21 and S22, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(m) One (1) Drever Sintering Furnace, identified as 507-12, constructed on December 1, 1994, firing natural gas, exhausting to stacks S01 and S02, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(n) One (1) Drever Sintering Furnace, identified as 507-13, constructed on December 1, 1994, firing natural gas, exhausting to stacks S15 and S16, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(o) One (1) Drever Sintering Furnace, identified as 507-14, constructed on December 20, 1996, firing natural gas, exhausting to stacks S28, S29 and S30 capacity: 2.45 million British thermal units per hour andv 600 pounds of iron powder per hour.

(p) One (1) Drever Sintering Furnace, identified as 507-15, constructed on March 3, 1997, firing natural gas, exhausting to stacks S31, S32 and S33, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(q) One (1) Drever Sintering Furnace, identified as 507-16, constructed on September 3, 1999, firing natural gas, exhausting to stacks S34, S35 and S36, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(r) One (1) Drever Sintering Furnace, identified as 507-17, constructed on May 12, 1997, firing natural gas, exhausting to stacks S37, S38 and S39, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(s) One (1) Draw Sintering Furnace, identified as 511-03, constructed on December 1, 1998, firing natural gas, exhausting to stacks D01 and D02, capacity: 0.145 million British thermal units per hour and 600 pounds of iron powder per hour.

(t) One (1) Draw Sintering Furnace, identified as 511-05, constructed on October 1, 1999, firing natural gas, exhausting to stacks D03 and D04, capacity: 0.145 million British thermal units per hour and 600 pounds of iron powder per hour.

(u) One (1) Area Electric Sintering Furnace, identified as 526-06, constructed on September 21, 1981, exhausting to stacks S10, S11 and S12, capacity: 200 pounds of iron powder per hour.

(v) Six (6) endothermic gas generators, identified as 507-100 through 507-105, firing natural gas, constructed in 1971, capacity: 0.250 million British thermal units per hour, each.

(w) One (1) endothermic gas generator, identified as 507-108, firing natural gas, constructed on April 1,1994, capacity: 0.250 million British thermal units per hour.

(x) One (1) endothermic gas generator, identified as 507-109, firing natural gas, constructed in 1975, capacity: 0.250 million British thermal units per hour.

(y) One (1) endothermic gas generator, identified as 507-111, firing natural gas, constructed on October 1,1994, capacity: 0.250 million British thermal units per hour.

(z) One (1) endothermic gas generator, identified as 507-112, firing natural gas, constructed on October 23,1994, capacity: 0.250 million British thermal units per hour, each.

(aa) One (1) endothermic gas generator, identified as 507-113, firing natural gas, constructed on October 28,1996, capacity: 0.750 million British thermal units per hour, each.

(bb) One (1) secondary machining operations facility, consisting of wet grinding, lathe turning, drilling, tapping, and vibratory deburring.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

(cc) One (1) Sintering Furnace, identified as 507-18, constructed in February 2000, firing natural gas, firing natural gas, exhausting to stacks S40 and S41, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(dd) One (1) Sintering Furnace, identified as 507-19, constructed in April 2000, firing natural gas, exhausting to stacks S42 and S43, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(ee) One (1) Sintering Furnace, identified as 507-20, constructed in March 2000, firing natural gas, exhausting to stacks S44 and S45, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(ff) One (1) Sintering Furnace, identified as 507-21, constructed in August 2000, firing natural gas, exhausting to stacks S46 and S47, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(gg) One (1) Sintering Furnace, identified as 507-22, constructed in April 2000, firing natural gas, exhausting to stacks S48 and S49, capacity: 2.45 million British thermal units per hour and 600 pounds of iron powder per hour.

(hh) One (1) boiler, identified as 512-01, firing natural gas, constructed on June 15, 1995, exhausting to stack B01, capacity: 0.126 million British thermal units per hour.

(ii) One (1) boiler, identified as 512-22-2, firing natural gas, constructed in 1971, exhausting to stack B02, capacity: 0.0382 million British thermal units per hour.

New Emission Units and Pollution Control Equipment

There are no new facilities/units requiring approval during this review.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Registration, issued on September 18,1979;

(b) Registration, issued on October 20, 1981;

(c) Construction Permit CP 175-3377-00011, issued on July 27,1994;

(d) Exempt Construction Permit CP 175-8081-00011, issued on March 11, 1997: and

(e) A175-8480-00011, issued on June 2, 1997

All conditions from previous approvals were incorporated into this permit except the following:

CP 175-8081-00011, issued on March 11, 1997

This Registration will not incorporate the one (1) pound per hour PM limit for the sintering furnaces. This limit was issued so an Exemption would be required instead of a Registration. Since permitting level is based on the potential to emit, and the entire source requires a Registration pursuant to 326 IAC 2-5.5, the one (1) pound per hour limit is not applicable.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
B01	Boiler 512-01	26.0	0.833	20.0	200
B02	Boiler 512-22-2	26.0	0.833	20.0	200
S01	Sintering Furnace 507-12	31.0	1.33	225.0	400
S02	Sintering Furnace 507-12	31.0	1.00	75.0	275
S03	Sintering Furnaces 507-12 and 507-04	31.0	1.33	150.0	275
S04	Sintering Furnaces 507-03 and 507-04	31.0	2.50	1100.0	360
S05	Sintering Furnace 507-03	31.0	1.33	75.0	275
S06	Sintering Furnaces 507-01 and 507-02	31.0	2.50	1100.0	360

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S07	Sintering Furnace 507-05	31.0	1.00	75.0	275
S08	Sintering Furnace 507-05	31.0	2.50	225.0	400
S09	Sintering Furnace 507-05	31.0	0.83	75.0	275
S10	Sintering Furnace 526-06	31.0	0.66	35.0	225
S11	Sintering Furnace 526-06	31.0	0.66	20.0	300
S12	Sintering Furnace 526-06	31.0	0.66	35.0	225
S13	Sintering Furnace 507-07	31.0	0.83	275.0	325
S14	Sintering Furnace 507-07	31.0	0.83	275.0	325
S15	Sintering Furnace 507-13	31.0	1.00	75.0	275
S16	Sintering Furnace 507-13	31.0	1.33	225.0	400
S17	Sintering Furnace 507-13	31.0	1.00	75.0	275
S18	Sintering Furnace 507-10	31.0	1.00	75.0	275
S19	Sintering Furnace 507-10	31.0	1.33	475.0	375
S20	Sintering Furnace 507-11	31.0	1.33	475.0	375
S21	Sintering Furnace 507-11	31.0	1.00	75.0	225
S22	Sintering Furnace 507-09	31.0	1.33	425.0	375
S23	Sintering Furnace 507-09	31.0	1.33	75.0	225
S24	Sintering Furnace 507-08	31.0	0.83	75.0	225
S25	Sintering Furnace 507-08	31.0	0.83	25.0	175
S26	Sintering Furnace 507-08	31.0	1.00	225.0	400
S27	Sintering Furnace 507-08	31.0	1.00	75.0	225
S28	Sintering Furnace 507-14	31.0	0.83	75.0	275
S29	Sintering Furnace 507-14	31.0	1.33	225.0	400
S30	Sintering Furnace 507-14	31.0	1.00	75.0	275
S31	Sintering Furnace 507-15	31.0	1.00	75.0	275
S32	Sintering Furnace 507-15	31.0	1.33	225.0	400
S33	Sintering Furnace 507-15	31.0	1.00	75.0	275
S34	Sintering Furnace 507-16	31.0	1.00	75.0	275
S35	Sintering Furnace 507-16	31.0	1.33	225.0	400
S36	Sintering Furnace 507-16	31.0	1.00	75.0	275

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S37	Sintering Furnace 507-17	31.0	1.00	75.0	275
S38	Sintering Furnace 507-17	31.0	1.33	225.0	400
S39	Sintering Furnace 507-17	31.0	1.00	75.0	275
S40	Sintering Furnace 507-18	36.0	1.00	75.0	275
S41	Sintering Furnace 507-18	36.0	1.33	225.0	400
S42	Sintering Furnace 507-19	36.0	1.00	75.0	275
S43	Sintering Furnace 507-19	36.0	1.33	225.0	400
S44	Sintering Furnace 507-20	36.0	1.00	75.0	275
S45	Sintering Furnace 507-20	36.0	1.33	225.0	400
S46	Sintering Furnace 507-21	36.0	1.00	75.0	275
S47	Sintering Furnace 507-21	36.0	1.33	225.0	400
S48	Sintering Furnace 507-22	36.0	1.00	75.0	275
S49	Sintering Furnace 507-22	36.0	1.33	225.0	400
D01	Draw Furnace 511-03	36.0	1.00	15.0	150
D02	Draw Furnace 511-03	36.0	1.00	15.0	150
D03	Draw Furnace 511-05	36.0	1.00	15.0	150
D04	Draw Furnace 511-05	36.0	1.00	15.0	150

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper approval. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment.*

(b) IDEM is reviewing this matter and will take appropriate action. This proposed Registration is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 8, 2000, with additional information received on October 18, 2000 and November 1, 2000.

Emission Calculations

See pages 1 through 13 of 13 of Appendix A of this document for detailed emissions calculations.

Note: There are negligible emissions from the one (1) secondary machining operations facility, consisting of wet grinding, lathe turning, drilling, tapping, and vibratory deburring.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	**Potential To Emit** (tons/year)
PM	4.10
PM_{10}	5.48
SO_2	0.145
VOC	1.33
CO	20.3
NO_X	24.2

HAPs	**Potential To Emit** (tons/year)
Benzene	0.0005
Dichlorobenzene	0.0003
Formaldehyde	0.018
Hexane	0.435
Toluene	0.0008
Lead	0.0001
Cadmium	0.0003
Chromium	0.0003
Manganese	0.00009
Nickel	0.0005
TOTAL	0.456

The potential to emit (as defined in 326 IAC 2-5.1-2) of CO and NO_X are less than twenty-five (25) tons per year and greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2 (Registrations)

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Washington County.

Pollutant	Status
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_X) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Washington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR Part 52.21.

(b) Washington County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR Part 52.21.

Source Status

Existing Source PSD, Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	4.10
PM_{10}	5.48
SO_2	0.145
VOC	1.33
CO	20.3
NO_X	24.2

(a) This existing source is **not** a major stationary source because even though it is one of the 28 listed source categories, it does not emit one hundred (100) tons per year or greater of any regulated pollutants.

(b) These emissions were based on the potential to emit table in this document.

Note: Pursuant to 326 IAC 8-13-2 (12), a "Sintering Process" means the process of igniting fuel in sinter burden and then heating it under an induced draft to form an agglomerate. Therefore, this source is considered one of the 28 listed source categories

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit CP 175-12587-00011, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than one hundred (100) tons per year,

(b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and

(c) any combination of HAPS is less than twenty-five (25) tons per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAM inspector assigned to the source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20, 40 CFR Part 61,and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-4.1-1 (New Source Toxics Control)

The potential to emit of each individual HAP is less than ten (10) tons per year and the potential to emit of total HAPs is less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-4.1-1, New Source Toxics Control, are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is located in Washington County and the potential to emit PM_{10} ,VOC and NO_X are less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR Part 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2-3 (Particulate Emissions Limitations for Facilities Constructed prior to September 21, 1983)

The one (1) boiler, identified as 512-22-2, constructed in 1971, with a total heat input capacity of 0.0382 million British thermal units per hour, must comply with the PM emission limitation of 326 IAC 6-2-3. This limitation is based on the following equation is given in 326 IAC 6-2-3:

$$Pt = C \times a \times h / 76.5 \times Q^{0.75} \times N^{0.25}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 mmBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 mmBtu/hr heat input.

h = Stack height in feet.

For the one (1) boiler:
$Pt = 50 \times 0.67 \times 26.0 / 76.5 \times (0.0382)^{0.75} \times 1^{0.25} = 131.77$ lb/MMBtu

Pursuant to 326 IAC 6-2-3(d), Pt for all facilities used for indirect heating purposes which were existing and in operation on or before June 8, 1972 shall not exceed 0.8 pound per million British thermal units. Therefore, the one (1) boiler is limited to emissions of 0.8 pound per million British thermal units.

Based on Appendix A, the potential to emit PM emissions from the one (1) boiler limited to 0.8 pound PM per million British thermal units is 0.0003 tons per year.

0.0003 tons/yr × (2000 lbs/ton / 8760 hrs/yr) = 0.00007 lbs/hr
(0.00007 lbs/hr /0.0382 MMBtu/hr) = 0.002 lbs PM per MMBtu

Therefore, the one (1) boiler identified as 512-22-2 will comply with this rule.

326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

The one (1) boiler, known as 512-01, constructed on June 5, 1995, must comply with the requirements of 326 IAC 6-2-4. The emission limitations are based on the following equation is given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The heat input capacity of the one (1) boiler is 0.126 million British thermal units per hour.

$Pt = 1.09/(0.126)^{0.26} = 1.86$lb/MMBtu heat input

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6 pound per million British thermal units. Therefore, the one (1) boiler is limited to emissions of 0.6 pound per million British thermal units.

Based on Appendix A, the potential PM emission rate is:

0.001 ton/yr × (2000 lbs/ton / 8760 hrs/yr) = 0.0002lb/hr
(0.0002 lb/hr / 0.75 MMBtu/hr) = 0.0003lb PM per MMBtu

Therefore, the one(1) boiler identified as 512-01, constructed on June 15,1995, will comply with this rule.

326 IAC 6-3-2 (Process Operations)

(a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the twenty-two (22) sintering furnaces shall not exceed 1.83 pounds per hour, each, when operating at a process weight rate of 600 pounds per hour, each.

The PM emissions from the twenty-two (22) sintering furnaces are 0.04 pounds per hour, each, which is less than the allowable PM emission rate of 1.83 pounds per hour, each. Therefore, the twenty-two (22) sintering furnaces will comply with this rule.

(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the one (1) sintering furnace shall not exceed 1.51 pounds per hour when operating at a process weight rate of 450 pounds per hour.

The PM emissions from the one (1) sintering furnace is 0.01 pounds per hour which is less than the allowable PM emission rate of 1.51 pounds per hour. Therefore, the one (1) sintering furnace will comply with this rule.

(c) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the one (1) sintering furnace shall not exceed 0.88 pounds per hour when operating at a process weight rate of 200 pounds per hour.

The PM emissions from the one (1) sintering furnace is 0.03 pounds per hour which is less than the allowable PM emission rate of 0.88 pounds per hour. Therefore, the one (1) sintering furnace will comply with this rule.

(d) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the two (2) powder blending units shall not exceed 3.34 pounds per hour, each, when operating at a process weight rate of 1,470 pounds per hour, each.

The PM emissions from the two (2) powder blending units before controls are 0.073 pounds per hour which is less than the allowable PM emission rate of 3.34 pounds per hour. Therefore, the two (2) powder blending units are in compliance with this rule.

These limitations are based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Conclusion

The operation of this sintered iron powder metal parts manufacturing source shall be subject to the conditions of the attached proposed Registration 175-12587-00011

Appendix A: Emission Calculations
Blending Operations

Company Name: G K N Sinter Metals, Inc
Address City IN Zip: Becks Mill Road, Salem, Indiana 47167
Minor Source Operating Permit: 175-12587
Plt ID: 175-00011
Reviewer: Craig J. Friederich
Date: August 8, 2000

Pollutant	Production Schedule (hrs/yr)	Actual Collected (tons/yr)	Potential Collected (tons/yr)
PM10	6000	2.13	3.11

Potential Emissions After Controls

Pollutant	Potential Collected (tons/yr)	Control Efficiency (%)	Potential Generated (tons/yr)	Emissions after controls (tons/yr)
PM10	3.11	99.9%	3.11	0.003

Methodology

Actual collected (tons/yr) = amount of dust collected in one year while operating 6000 hours.

Potential collected (tons/yr) =(Actual collected (tons/yr) /6000 hours) * 8760 hr/yr

Potential generated (tons/yr) = Potential Collected (tons/yr) / control efficiency %

Emissions after controls (tons/yr) = potential generated (tons/yr) * (1-control efficiency (%))

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Total Sintering Furnace Emissions

Company Name: **G K N Sinter Metals, Inc**
Address City IN Zip: **Becks Mill Road, Salem, Indiana 47167**
MSOP: **175-12587**
Plt ID: **175-00011**
Reviewer: **Craig J. Friederich**
Date: **August 8, 2000**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
51.74	453.24

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.431	1.72	0.136	22.7	1.25	19.0

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 4 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: **G K N Sinter Metals, Inc**
Address City IN Zip: **Becks Mill Road, Salem, Indiana 47167**
MSOP: **175-12587**
Plt ID: **175-00011**
Reviewer: **Craig J. Friederich**
Date: **August 8, 2000**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	4.759E-04	2.719E-04	1.700E-02	4.079E-01	7.705E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.133E-04	2.493E-04	3.173E-04	8.612E-05	4.759E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Eleven(11) Endothermic Gas Generators

Company Name: **G K N Sinter Metals, Inc**
Address City IN Zip: **Becks Mill Road, Salem, Indiana 47167**
Part 70: **175-12587**
Plt ID: **175-00011**
Reviewer: **Craig J. Friederich**
Date: **August 8, 2000**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
3.25	28.47

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.027	0.108	0.009	1.42	0.078	1.20

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 4 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Eleven(11) Endothermic Gas Generators
HAPs Emissions
Company Name: G K N Sinter Metals, Inc
Address City IN Zip: Becks Mill Road, Salem, Indiana 47167
Part 70: 175-12587
Plt ID: 175-00011
Reviewer: Craig J. Friederich
Date: August 8, 2000

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.989E-05	1.708E-05	1.068E-03	2.562E-02	4.840E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	7.118E-06	1.566E-05	1.993E-05	5.409E-06	2.989E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
One (1) Boiler built in 1995 Identified as 512-01

Company Name: **G K N Sinter Metals, Inc**
Address City IN Zip: **Becks Mill Road, Salem, Indiana 47167**
Part 70: **175-12587**
Plt ID: **175-00011**
Reviewer: **Craig J. Friederich**
Date: **August 8, 2000**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.126	1.10

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.001	0.004	0.0003	0.06	0.003	0.05

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 4 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
One (1) Boiler built in 1995 Identified as 512-01
HAPs Emissions

Company Name: **G K N Sinter Metals, Inc**
Address City IN Zip: **Becks Mill Road, Salem, Indiana 47167**
Part 70: **175-12587**
Plt ID: **175-00011**
Reviewer: **Craig J. Friederich**
Date: **August 8, 2000**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.159E-06	6.623E-07	4.139E-05	9.934E-04	1.876E-06

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.759E-07	6.071E-07	7.726E-07	2.097E-07	1.159E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
One(1) Boiler built in 1971 identified as 512-22-2

Company Name: **G K N Sinter Metals, Inc**
Address City IN Zip: **Becks Mill Road, Salem, Indiana 47167**
Part 70: **175-12587**
Plt ID: **175-00011**
Reviewer: **Craig J. Friederich**
Date: **August 8, 2000**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.038	0.33

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.0003	0.001	0.0001	0.017	0.001	0.014

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 4 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
One(1) Boiler built in 1971 identified as 512-22-2
HAPs Emissions
Company Name: **G K N Sinter Metals, Inc**
Address City IN Zip: **Becks Mill Road, Salem, Indiana 47167**
Part 70: **175-12587**
Plt ID: **175-00011**
Reviewer: **Craig J. Friederich**
Date: **August 8, 2000**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	3.514E-07	2.008E-07	1.255E-05	3.012E-04	5.689E-07

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	8.366E-08	1.840E-07	2.342E-07	6.358E-08	3.514E-07

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Process Emissions From all Sintering Furnaces

Company Name: G K N Sinter Metals, Inc
Address City IN Zip: Becks Mill Road, Salem, Indiana 47167
Part 70: 175-12587
Plt ID: 175-00011
Reviewer: Craig J. Friederich
Date: August 8, 2000

Iron Process	Throughput tons/hr
Sintering	6.93

SCC 30300819

	PM and PM10	VOC
Emission Factors lbs/ton produced	0.12	0.05
Percentage of Emissions	100.00%	100.00%
Potential Emissions lbs/hr	0.832	0.347
Potential Emissions lbs/day	19.96	8.32
Potential Emissions tons/yr	3.64	1.52

Appendix A: Emission Calculations

Process Emissions From one (1) Sintering Furnace rated at 450 lbs/hour

Company Name: G K N Sinter Metals, Inc
Address City IN Zip: Becks Mill Road, Salem, Indiana 47167
Part 70: 175-12587
Plt ID: 175-00011
Reviewer: Craig J. Friederich
Date: August 8, 2000

Iron Process		Throughput tons/hr
Sintering		0.225

SCC 30300819

	PM and PM10	VOC
Emission Factors lbs/ton produced	0.12	0.05
Percentage of Emissions	100.00%	100.00%
Potential Emissions lbs/hr	0.03	0.01
Potential Emissions lbs/day	0.65	0.27
Potential Emissions tons/yr	0.12	0.05

Appendix A: Emission Calculations

Process Emissions From one (1) Sintering Furnace rated at 200 lbs/hour

Company Name: G K N Sinter Metals, Inc
Address City IN Zip: Becks Mill Road, Salem, Indiana 47167
Part 70: 175-12587
Plt ID: 175-00011
Reviewer: Craig J. Friederich
Date: August 8, 2000

Iron Process		Throughput tons/hr
Sintering		0.10

SCC 30300819

	PM and PM10	VOC
Emission Factors lbs/ton produced	0.12	0.05
Percentage of Emissions	100.00%	100.00%
Potential Emissions lbs/hr	0.01	0.01
Potential Emissions lbs/day	0.29	0.12
Potential Emissions tons/yr	0.05	0.02

Appendix A: Emission Calculations

Process Emissions From one (1) Sintering Furnace rated at 600 lbs/hour

Company Name: G K N Sinter Metals, Inc
Address City IN Zip: Becks Mill Road, Salem, Indiana 47167
Part 70: 175-12587
Plt ID: 175-00011
Reviewer: Craig J. Friederich
Date: August 8, 2000

Iron Process		Throughput tons/hr
Sintering		0.30

SCC 30300819

	PM and PM10	VOC
Emission Factors lbs/ton produced	0.12	0.05
Percentage of Emissions	100.00%	100.00%
Potential Emissions lbs/hr	0.04	0.02
Potential Emissions lbs/day	0.86	0.36
Potential Emissions tons/yr	0.16	0.07